

(710) Broadband Price Offerings
Data Collection Form

FCC Form 481
OMB Control No. 3060-0986/OMB Control No. 3060-0819
July 2013

OMB Control No. 3060-0986/OMB Control No. 3060-0819
July 2013

<010>	Study Area Code	519905
<015>	Study Area Name	UNION TELEPHONE CO. DBA UNION CELLULAR
<020>	Program Year	2015
<030>	Contact Name - Person USAC should contact regarding this data	Chris Reno
<035>	Contact Telephone Number - Number of person identified in data line <030>	3077824159 ext.
<039>	Contact Email Address - Email Address of person identified in data line <030>	creno@unionwireless.com

[illegible]

Study Area Code: 518001
Study Area Name: Carbon, WY
Program Year: 2014
Contact Person: Chris Reno
Contact Telephone Number: 307-747-6159
Contact Email: creno@unionwireless.com
Carrier Reference Name: Carbon WY-1



PROJECT STATUS DESCRIPTION

SECTION I: DESCRIPTION OF OVERALL PROJECT PLAN

- 3G RNC/MSC/GGSN/SGSN PLUS 4G EPC

In order to launch this system, the necessary 3G and 4G core network needed to be completed and turned operational. This system totals roughly \$3.4 million in network core equipment, which will be shared across all 6 census tracts granted funding to Union Telephone Company in the FCC 901 Mobility Fund.

The core is located in Cheyenne, Wyoming and is fed via dual OC12 networks, giving full redundancy and capacity to support all tower sites related to this project and other network growth on the Union Wireless network. Additional OC12's are already planned as demand increases and also to provide carrier diversity in case of an outage on one particular carriers' network.

STATUS – This portion of the project is complete. Please refer to Section II for more details on the status of the network deployment.

- MIDDLE MILE BACKHAUL

In addition, Union is upgrading its middle mile capabilities in key sections of Wyoming that will allow adequate backhaul facilities to its new 3G and 4G network core.

The first of these upgrades is located in Carbon County, WY between the towns of Hanna and Saratoga. This project connects two new service providers and allow connectivity into several key remote offices within Union Telephone Company's network.

STATUS – This portion of the project is complete. Please refer to Section II for more details on the status of the network deployment.

The second middle mile upgrade was determined to be necessary after 3G/4G deployments in and around the FCC Mobility Fund Phase I deployments starting becoming accessible to consumers. The steep uptake in data services required further upgrades from Rawlins north to the towns of Casper and Riverton to maintain the long-term data speed requirements across all six census tracts as required by fund.



Study Area Code: 518001
Study Area Name: Carbon, WY
Program Year: 2014
Contact Person: Chris Reno
Contact Telephone Number: 307-747-6159
Contact Email: creno@unionwireless.com
Carrier Reference Name: Carbon WY-1

STATUS – This portion of the project is under construction. Please refer to Section II for more details on the status of the network deployment.

- CARBON WY-1 (T56007968000) 4G HSPA+

This is by far the largest single undertaking and largest funding tract in Union Telephone Company's overall project. This census tract is split in two areas, with the east being the communities of Saratoga, Encampment and Ryan Park while the west is Medicine Bow Routt National Forest. This project consists of six overlays on existing Union Telephone facilities and five new site deployments. After completing the overlays near the communities, an additional overlay was added to the project at an existing Union Telephone central office to facilitate greater capacity and data speeds for the rural consumer.

TYPE OF BACKHAUL – Given the remote nature of sites in and around Wyoming, Union Wireless is using licensed microwave wherever feasible and unlicensed microwave if no available licenses are capable of being obtained. We are targeting at least 25 Mbps of IP backhaul to each cell tower.

SPECTRUM – In this market, we are using 850 MHz Spectrum. All 850 MHz sites fall within existing CGSA boundaries and Union do not affect existing filings, as the intention is to keep GSM fully operational alongside UMTS.

KEY RISKS OR CHALLENGES - Given that this is by far the largest cluster geographically and in manner of funding, Union Wireless is taking a staged approach to completing this project. By first deploying the network on the 6 overlay sites, Union Wireless is ensuring that the area gets covered adequately.

For the new sites located primarily within the Medicine Bow Routt National Forest, our goal is to site the towers to ensure the least impact to the National Forest, while still meeting the requirements on performance and coverage along the eligible roads. Discussions with the USFS representatives have led to questions about roads shown in the tiger road maps that have been decommissioned or to which the USFS no longer allows public access. The USFS has also expressed interest in testing locations for adequate coverage prior to pursuing permanent installations.

Union Telephone Company has also determined that going after 4G speeds would also be beneficial for the cluster, as not only is the timelines related to the acquisition of sites on the Forest a bit of a concern, but the amount of wilderness and rolling terrain pose a unique challenge. Most of Wyoming has little to



Study Area Code: 518001
Study Area Name: Carbon, WY
Program Year: 2014
Contact Person: Chris Reno
Contact Telephone Number: 307-747-6159
Contact Email: creno@unionwireless.com
Carrier Reference Name: Carbon WY-1

no form of ground clutter; however this region has a large population of various deciduous and coniferous trees. Combine this with the eastern portion of the cluster having a reasonable population center, by taking the 4G route, Union Wireless will be better positioned in meeting the targeted timelines for this very challenging terrain and clutter.

Union Wireless intends to utilize HSPA+ technologies initially, but will also be looking to how LTE performs in other areas and whether the lower frequencies or higher frequencies do well with the varied clutter.

STATUS – This portion of the project is in construction and deployment. Please refer to Section II for more details on the status of the network deployment.

LEGEND		MILESTONE IN PROGRESS		MILESTONE COMPLETE		MILESTONE DEFERRED		MILESTONE DELETED		DATE AUTHORIZED TO BE DELETED	
YEAR	MONTH	DATE	DESCRIPTION	STATUS	REASON	DATE	DESCRIPTION	STATUS	REASON	DATE	DESCRIPTION
2013	JAN	15	CONSTRUCTION	COMPLETE		2013	JAN	15	CONSTRUCTION	COMPLETE	
2013	FEB	15	CONSTRUCTION	COMPLETE		2013	FEB	15	CONSTRUCTION	COMPLETE	
2013	MAR	15	CONSTRUCTION	COMPLETE		2013	MAR	15	CONSTRUCTION	COMPLETE	
2013	APR	15	CONSTRUCTION	COMPLETE		2013	APR	15	CONSTRUCTION	COMPLETE	
2013	MAY	15	CONSTRUCTION	COMPLETE		2013	MAY	15	CONSTRUCTION	COMPLETE	
2013	JUN	15	CONSTRUCTION	COMPLETE		2013	JUN	15	CONSTRUCTION	COMPLETE	
2013	JUL	15	CONSTRUCTION	COMPLETE		2013	JUL	15	CONSTRUCTION	COMPLETE	
2013	AUG	15	CONSTRUCTION	COMPLETE		2013	AUG	15	CONSTRUCTION	COMPLETE	
2013	SEP	15	CONSTRUCTION	COMPLETE		2013	SEP	15	CONSTRUCTION	COMPLETE	
2013	OCT	15	CONSTRUCTION	COMPLETE		2013	OCT	15	CONSTRUCTION	COMPLETE	
2013	NOV	15	CONSTRUCTION	COMPLETE		2013	NOV	15	CONSTRUCTION	COMPLETE	
2013	DEC	15	CONSTRUCTION	COMPLETE		2013	DEC	15	CONSTRUCTION	COMPLETE	
2014	JAN	15	CONSTRUCTION	COMPLETE		2014	JAN	15	CONSTRUCTION	COMPLETE	
2014	FEB	15	CONSTRUCTION	COMPLETE		2014	FEB	15	CONSTRUCTION	COMPLETE	
2014	MAR	15	CONSTRUCTION	COMPLETE		2014	MAR	15	CONSTRUCTION	COMPLETE	
2014	APR	15	CONSTRUCTION	COMPLETE		2014	APR	15	CONSTRUCTION	COMPLETE	
2014	MAY	15	CONSTRUCTION	COMPLETE		2014	MAY	15	CONSTRUCTION	COMPLETE	
2014	JUN	15	CONSTRUCTION	COMPLETE		2014	JUN	15	CONSTRUCTION	COMPLETE	
2014	JUL	15	CONSTRUCTION	COMPLETE		2014	JUL	15	CONSTRUCTION	COMPLETE	
2014	AUG	15	CONSTRUCTION	COMPLETE		2014	AUG	15	CONSTRUCTION	COMPLETE	
2014	SEP	15	CONSTRUCTION	COMPLETE		2014	SEP	15	CONSTRUCTION	COMPLETE	
2014	OCT	15	CONSTRUCTION	COMPLETE		2014	OCT	15	CONSTRUCTION	COMPLETE	
2014	NOV	15	CONSTRUCTION	COMPLETE		2014	NOV	15	CONSTRUCTION	COMPLETE	
2014	DEC	15	CONSTRUCTION	COMPLETE		2014	DEC	15	CONSTRUCTION	COMPLETE	
2015	JAN	15	CONSTRUCTION	COMPLETE		2015	JAN	15	CONSTRUCTION	COMPLETE	
2015	FEB	15	CONSTRUCTION	COMPLETE		2015	FEB	15	CONSTRUCTION	COMPLETE	
2015	MAR	15	CONSTRUCTION	COMPLETE		2015	MAR	15	CONSTRUCTION	COMPLETE	
2015	APR	15	CONSTRUCTION	COMPLETE		2015	APR	15	CONSTRUCTION	COMPLETE	
2015	MAY	15	CONSTRUCTION	COMPLETE		2015	MAY	15	CONSTRUCTION	COMPLETE	
2015	JUN	15	CONSTRUCTION	COMPLETE		2015	JUN	15	CONSTRUCTION	COMPLETE	
2015	JUL	15	CONSTRUCTION	COMPLETE		2015	JUL	15	CONSTRUCTION	COMPLETE	
2015	AUG	15	CONSTRUCTION	COMPLETE		2015	AUG	15	CONSTRUCTION	COMPLETE	
2015	SEP	15	CONSTRUCTION	COMPLETE		2015	SEP	15	CONSTRUCTION	COMPLETE	
2015	OCT	15	CONSTRUCTION	COMPLETE		2015	OCT	15	CONSTRUCTION	COMPLETE	
2015	NOV	15	CONSTRUCTION	COMPLETE		2015	NOV	15	CONSTRUCTION	COMPLETE	
2015	DEC	15	CONSTRUCTION	COMPLETE		2015	DEC	15	CONSTRUCTION	COMPLETE	

SECTION II: 18801 - STATE OF THE NETWORK DEPLOYMENT PROJECT

LEGEND		2014		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034		2035		2036		2037		2038		2039		2040		2041		2042		2043		2044		2045		2046		2047		2048		2049		2050		2051		2052		2053		2054		2055		2056		2057		2058		2059		2060		2061		2062		2063		2064		2065		2066		2067		2068		2069		2070		2071		2072		2073		2074		2075		2076		2077		2078		2079		2080		2081		2082		2083		2084		2085		2086		2087		2088		2089		2090		2091		2092		2093		2094		2095		2096		2097		2098		2099		2100		2101		2102		2103		2104		2105		2106		2107		2108		2109		2110		2111		2112		2113		2114		2115		2116		2117		2118		2119		2120		2121		2122		2123		2124		2125		2126		2127		2128		2129		2130		2131		2132		2133		2134		2135		2136		2137		2138		2139		2140		2141		2142		2143		2144		2145		2146		2147		2148		2149		2150		2151		2152		2153		2154		2155		2156		2157		2158		2159		2160		2161		2162		2163		2164		2165		2166		2167		2168		2169		2170		2171		2172		2173		2174		2175		2176		2177		2178		2179		2180		2181		2182		2183		2184		2185		2186		2187		2188		2189		2190		2191		2192		2193		2194		2195		2196		2197		2198		2199		2200		2201		2202		2203		2204		2205		2206		2207		2208		2209		2210		2211		2212		2213		2214		2215		2216		2217		2218		2219		2220		2221		2222		2223		2224		2225		2226		2227		2228		2229		2230		2231		2232		2233		2234		2235		2236		2237		2238		2239		2240		2241		2242		2243		2244		2245		2246		2247		2248		2249		2250		2251		2252		2253		2254		2255		2256		2257		2258		2259		2260		2261		2262		2263		2264		2265		2266		2267		2268		2269		2270		2271		2272		2273		2274		2275		2276		2277		2278		2279		2280		2281		2282		2283		2284		2285		2286		2287		2288		2289		2290		2291		2292		2293		2294		2295		2296		2297		2298		2299		2300		2301		2302		2303		2304		2305		2306		2307		2308		2309		2310		2311		2312		2313		2314		2315		2316		2317		2318		2319		2320		2321		2322		2323		2324		2325		2326		2327		2328		2329		2330		2331		2332		2333		2334		2335		2336		2337		2338		2339		2340		2341		2342		2343		2344		2345		2346		2347		2348		2349		2350		2351		2352		2353		2354		2355		2356		2357		2358		2359		2360		2361		2362		2363		2364		2365		2366		2367		2368		2369		2370		2371		2372		2373		2374		2375		2376		2377		2378		2379		2380		2381		2382		2383		2384		2385		2386		2387		2388		2389		2390		2391		2392		2393		2394		2395		2396		2397		2398		2399		2400		2401		2402		2403		2404		2405		2406		2407		2408		2409		2410		2411		2412		2413		2414		2415		2416		2417		2418		2419		2420		2421		2422		2423		2424		2425		2426		2427		2428		2429		2430		2431		2432		2433		2434		2435		2436		2437		2438		2439		2440		2441		2442		2443		2444		2445		2446		2447		2448		2449		2450		2451		2452		2453		2454		2455		2456		2457		2458		2459		2460		2461		2462		2463		2464		2465		2466		2467		2468		2469		2470		2471		2472		2473		2474		2475		2476		2477		2478		2479		2480		2481		2482		2483		2484		2485		2486		2487		2488		2489		2490		2491		2492		2493		2494		2495		2496		2497		2498		2499		2500		2501		2502		2503		2504		2505		2506		2507		2508		2509		2510		2511		2512		2513		2514		2515		2516		2517		2518		2519		2520		2521		2522		2523		2524		2525		2526		2527		2528		2529		2530		2531		2532		2533		2534		2535		2536		2537		2538		2539		2540		2541		2542		2543		2544		2545		2546		2547		2548		2549		2550		2551		2552		2553		2554		2555		2556		2557		2558		2559		2560		2561		2562		2563		2564		2565		2566		2567		2568		2569		2570		2571		2572		2573		2574		2575		2576		2577		2578		2579		2580		2581		2582		2583		2584		2585		2586		2587		2588		2589		2590		2591		2592		2593		2594		2595		2596		2597		2598		2599		2600		2601		2602		2603		2604		2605		2606		2607		2608		2609		2610		2611		2612		2613		2614		2615		2616		2617		2618		2619		2620		2621		2622		2623		2624		2625		2626		2627		2628		2629		2630		2631		2632		2633		2634		2635		2636		2637		2638		2639		2640		2641		2642		2643		2644		2645		2646		2647		2648		2649		2650		2651		2652		2653		2654		2655		2656		2657		2658		2659		2660		2661		2662		2663		2664		2665		2666		2667		2668		2669		2670		2671		2672		2673		2674		2675		2676		2677		2678		2679		2680		2681		2682		2683		2684		2685		2686		2687		2688		2689		2690		2691		2692		2693		2694		2695		2696		2697		2698		2699		2700		2701		2702		2703		2704		2705		2706		2707		2708		2709		2710		2711		2712		2713		2714		2715		2716		2717		2718		2719		2720		2721		2722		2723		2724		2725		2726		2727		2728		2729		2730		2731		2732		2733		2734		2735		2736		2737		2738		2739		2740		2741		2742		2743		2744		2745		2746		2747		2748		2749		2750		2751		2752		2753		2754		2755		2756		2757		2758		2759		2760		2761		2762		2763		2764		2765		2766		2767		2768		2769		2770		2771		2772		2773		2774		2775		2776		2777		2778		2779		2780		2781		2782		2783		2784		2785		2786		2787		2788		2789		2790		2791		2792		2793		2794		2795		2796		2797		2798		2799		2800		2801		2802		2803		2804		2805		2806		2807		2808		2809		2810		2811		2812		2813		2814		2815		2816		2817		2818		2819		2820		2821		2822		2823		2824		2825		2826		2827		2828		2829		2830		2831		2832		2833		2834		2835		2836		2837		2838		2839		2840		2841		2842		2843		2844		2845		2846		2847		2848		2849		2850		2851		2852		2853		2854		2855		2856		2857		2858		2859		2860		2861		2862		2863		2864		2865		2866		2867		2868		2869		2870		2871		2872		2873		2874		2875		2876		2877		2878		2879		2880		2881		2882		2883		2884		2885		2886		2887		2888		2889		2890		2891		2892		2893		2894		2895		2896		2897		2898		2899		2900		2901		2902		2903		2904		2905		2906		2907		2908		2909		2910		2911		2912		2913		2914		2915		2916		2917		2918		2919		2920		2921		2922		2923		2924		2925		2926		2927		2928		2929		2930		2931		2932		2933		2934		2935		2936		2937		2938		2939		2940		2941		2942		2943		2944		2945		2946		2947		2948		2949		2950		2951		2952		2953		2954		2955		2956		2957		2958		2959		2960		2961		2962		2963		2964		2965		2966		2967		2968		2969		2970		2971		2972		2973		2974		2975		2976		2977		2978		2979		2980		2981		2982		2983		2984		2985		2986		2987		2988		2989		2990		2991		2992		2993		2994		2995		2996		2997		2998		2999		3000		3001		3002		3003		3004		3005		3006		3007		3008		3009		3010		3011		3012		3013		3014		3015		3016		3017		3018		3019		3020		3021		3022		3023		3024		3025		3026		3027		3028		3029		3030		3031		3032		3033		3034		3035		3036		3037		3038		3039		3040		3041		3042		3043		3044</	
--------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	--------	--



Study Area Code: 518001
Study Area Name: Carbon, WY
Program Year: 2014
Contact Person: Chris Reno
Contact Telephone Number: 307-782-6131
Contact Email: creno@unionwireless.com
Carrier Reference Name: Carbon-1

PROJECT STATUS DESCRIPTION

SECTION III: PROJECT BUDGET STATUS

Overlay Sites

- 5 each
 - New hardware Required
 - New Node B Base Station gear \$60,000 each
 - New Microwave gear for IP Backhaul \$150,000 each
 - Upgrades to tower antenna complex \$20,000 each
 - Labor to related projects \$50,000 each

Each overlay site estimated at \$300,000 cost each, total \$1,500,000 capital contribution

New Sites

- 5 each
 - New hardware Required
 - Tower installation
 - Leasing, zoning, permitting costs \$65,000 each
 - Tower site construction \$75,000 each
 - Tower Steel \$45,000 each
 - Lines, antennas, generators \$50,000 each
 - New Node B Base Station gear \$60,000 each
 - New Microwave gear for IP Backhaul \$50,000 each
 - Upgrades to tower antenna complex \$5,000 each
 - Labor to related projects \$50,000 each

Each overlay site estimated at \$400,000 cost each, for a \$2,000,000 total capital contribution for new sites.

Other related projects include 1 fiber to the site backhaul upgrade which will cost roughly \$350,000.

This totals roughly \$3.85 million in capital costs related to the build out.

Union is projecting incremental operating expenses for this site over 5 years to be \$4.29 million.



Study Area Code: 518001
Study Area Name: Carbon, WY
Program Year: 2014
Contact Person: Chris Reno
Contact Telephone Number: 307-782-6131
Contact Email: creno@unionwireless.com
Carrier Reference Name: Carbon-1

BUDGET STATUS –

Total Support Applied to Design/Construction/Deployment (Capital Contribution): **\$2,143,107.73– ON BUDGET**

Total Support Applied to Maintenance: **\$0 – ON BUDGET**